

## REMARKS

Claims 1, 7, 14, 15, and 16 are amended to clarify the invention and not for purposes of patentability. Claims 1-21 remain for consideration, and reconsideration and allowance of the application are respectfully requested.

The Office Action fails to establish that claims 16-21 are unpatentable under 35 USC §101 as claiming non-statutory subject matter. The rejection is respectfully traversed because the Office Action does not establish a *prima facie* case that the invention as a whole is directed solely to an abstract idea or to manipulation of abstract ideas or does not produce a useful result.

The Office Action generally states that the recitation of “a computer readable medium” does not constitute a concrete or tangible result, and that amending the claims to read “a computer-readable storage medium” would remedy the alleged deficiency. It is respectfully submitted, however, that those skilled in the art would recognize that the added term “storage” is not needed to provide a tangible result. For example, the definition of “medium” at the Merriam-Webster Online Dictionary (<http://www.m-w.com/dictionary/medium>) provides “(4) : something (as a magnetic disk) on which information may be stored.” Thus, those skilled in the art will recognize that the added term “storage” is unnecessary, and perhaps even redundant. The rejection should be withdrawn.

The Office Action fails to establish that claims 1-6 and 14-21 are unpatentable under 35 U.S.C. 103(a) over “Loaiza” (“U.S. Patent No. 6,549,901 to Loaiza et al.”) in view of “Weisz” (U.S. Patent No. 6,128,621 to Weisz). The rejection is respectfully traversed because the Office Action fails to show that all the limitations are suggested by the references and fails to provide a proper motivation for modifying the teachings of Loaiza with teachings of Weisz.

The cited teachings of the Loaiza-Weisz combination neither teach nor suggest the limitations of the first structure including a plurality of pointers that respectively reference a plurality of bit maps that indicate available and allocated portions of usable space in the data file, and the second structure contains respective values that indicate

quantities of available space in portions of the data file.

It is not apparent what elements of Weisz are construed to correspond to the claimed bit maps. The term “bit map” does not even appear in the text of Weisz. Therefore Weisz neither teaches nor suggests bit maps that indicate available and allocated portions of usable space in the data file, or even bit maps.

It is not apparent what elements of Loaiza are construed to correspond to values that indicate quantities of available space in portions of the data file. Not only is there no apparent reference to a quantity of space relative to a data file in the cited teachings, but there is no apparent reference to any tracking of available space in a data file. The bit map limitations describe space in the data file as being available or allocated. Portions of the data file that are not allocated are available (p. 5, l. 3-9). Neither Loaiza nor Weisz in any apparent manner suggests these limitations.

If the rejection is maintained, clarification is respectfully requested. Specifically, recitation of those specific elements of Loaiza and Weisz that are construed as corresponding to the claim limitations is requested.

The cited teachings of Loaiza neither teach nor suggest the limitations of maintaining in a control file first and second control structures and first and second pointers to the first and second control structures.

Loaiza's table space 130 includes multiple data files. There is no apparent suggestion or indication of a control file. Furthermore, the limitations clearly set forth that the control file includes first and second pointers to the first and second control structures in the control file. There is no mention in the cited teachings of pointers in the control file which point to control structures in the control file. Loaiza's cited teachings reference disk pointers, not pointers that reference bit maps.

Independent claims 1 and 16 include the limitations discussed above, and claims 2-6, 14-15, and 17-21 include further limitations that further detail the limitations of the base claims. Therefore, the limitations of claims 1-6 and 14-21 are not shown to be suggested by the Loaiza-Weisz combination for at least the reasons set forth above. Furthermore, the alleged motivation for combining Weisz with Loaiza is conclusory and improper. The rejection of claims 1-6 and 14-21 over the Loaiza-Weisz combination should be withdrawn.

The Office Action fails to establish that claims 7-14 are unpatentable under 35 U.S.C. 103(a) over “Anfindsen” (“U.S. Patent No. 6,751,617 to Anfindsen) in view of Loaiza. The rejection is respectfully traversed because the Office Action fails to show that all the limitations are suggested by the references and fails to provide a proper motivation for modifying the teachings of Anfindsen with teachings of Loaiza.

The cited teachings of the Anfindsen-Loaiza combination neither teach nor suggest the limitations of a control file including a first structure that contains pointers to second and third structures in the control file, wherein the second structure includes a plurality of pointers that respectively reference bit maps of the cells of the application file, each bit map indicating available and allocated records in the cell, and the third structure containing respective values that indicate quantities of available space in the cells (claims 7 and 14).

It is not apparent what elements of Anfindsen are construed to correspond to the claimed bit maps. The term “bitmap” is taught by Anfindsen for use in indicating read parameters of a lock control block and for use as representing write parameters in a lock control block (col. 5, l. 38-49). The cited teachings contain no apparent and relevant suggestion of bit maps used to indicate available and allocated records in the cells. Therefore, the Office Action fails to show that Anfindsen teaches or suggests bit maps that indicate available and allocated portions of usable space in the data file.

Similarly, the cited sections of Anfindsen contain no elements that appear to be relevant to the claimed third structure with the values that indicate quantities of available space in the cells.

The limitations also clearly indicate that the control file includes pointers to the second and third structures in the control file. Since the Office Action does not clearly indicate which elements of Anfindsen are construed to correspond to the claimed bitmaps, and the teachings of Anfindsen do not appear to be relevant, the limitations of the pointers to the second and third structures are not shown to be suggested.


If the rejection is maintained, clarification is respectfully requested. Specifically, recitation of those specific elements of Anfindsen and Loaiza that are construed as corresponding to the claim limitations is requested.

Independent claims 7 and 14 include the limitations discussed above, and claims 8-13 include further limitations that further detail the limitations of the base claims. Therefore, the limitations of claims 7-14 are not shown to be suggested by the Anfindsen-Loaiza combination for at least the reasons set forth above. Furthermore, the alleged motivation for combining Loaiza with Anfindsen is conclusory and improper. The rejection of claims 7-14 Anfindsen-Loaiza combination should be withdrawn.

Withdrawal of the rejections and reconsideration of the claims are respectfully requested in view of the remarks set forth above. No extension of time is believed to be necessary for consideration of this response. However, if an extension of time is required, please consider this a petition for a sufficient number of months for consideration of this response. If there are any additional fees in connection with this response, please charge Deposit Account No. 50-0996 (USYS.069PA).

Respectfully submitted,

CRAWFORD MAUNU PLLC  
1270 Northland Drive, Suite 390  
Saint Paul, MN 55120  
(651) 686-6633

By:   
Name: LeRoy D. Maunu  
Reg. No.: 35,274